

# A.C.L.



## GENERAL SPECIFICATIONS

DETAILS OF CODES ACCORDING TO MIL/JSS

### TEMPERATURE COEFFICIENT AND CAPACITANCE DRIFT

DESIGNATOR	TEMPERATURE COEFFICIENT (ppm/°C)	CAPACITANCE DRIFT
C	-200 to +200	+-(0.5 % + 0.1pF)
D	-100 to +100	+-(0.3 % + 0.1pF)
E	- 20 to +100	+-(0.1 % + 0.1pF)
F	- 0 to + 70	+-(0.05% + 0.1pF)
G	- 20 to + 50	+-(0.05% + 0.1pF)
H	- 20 to + 30	+-(0.05% + 0.1pF)

### OPERATING TEMPERATURE RANGE

DESIGNATOR	TEMP RANGE	DESIGNATOR	TEMP RANGE
L	-40 to +85°C	O	-55 to +125°C
N	-55 to +85°C	P	-55 to +150°C

### CAPACITANCE TOLERANCE

MIL				JSS			
SYMBOL	TOLERANCE	SYMBOL	TOLERANCE	SYMBOL	TOLERANCE	SYMBOL	TOLERANCE
C	+-0.5pF	G	+- 2%	A	+-0.25pF	F	+- 1%
A	+-1.0pF	J	+- 5%	B	+-0.5 pF	C	+- 2%
E	+-0.5%	K	+-10%	C	+-1.0 pF	J	+- 5%
F	+- 1%	M	+-20%	D	+-2.0 pF	K	+-10%
				E	+-0.5 %	M	+-20%

### RATED D.C. VOLTAGE

SYMBOL	VOLTAGE	SYMBOL	VOLTAGE	SYMBOL	VOLTAGE
Y	50	D	500	H	1500
A	100	E	600	J	2000
B	250	F	1000	K	2500
C	300	G	1200	L	3000

### ORDERING DATA

D15	C	D	102	J	P
I	I	I	I	I	I
STYLE	CHARACTERISTICS	VOLTAGE	CAPACITANCE	TOLERANCE	TEMPERATURE

Capacitance in picofarads is indicated by three digits. The first two digits represent significant figures and the third specifies the number of zeros to follow. Where the nominal capacitance is in fractions, the decimal point shall be indicated with letter 'p', 'n' or 'u' as the case may be, e.g. 5p6 indicates 5.6pF, 4n7 indicates 4.7nF and u22 indicates 0.22uF.

## OUR RANGE OF CAPACITANCE PER STYLE AND VOLTAGE

STYLE			CAPACITANCE RANGE IN pF					
AC	JSS	MIL	100 WVDC	300 WVDC	500 WVDC	1000 WVDC	1500 WVDC	2000 WVDC
<b>DIPPED RADIALS</b>								
D-05	CM05(A-N)		1- 200	1- 120				
D-07			1- 1500	1- 820	1- 510			
D-10	CM01(A-H)	CM04	1- 1500	1- 820	1- 510			
D-15	CM01(J-R)	CM05	1- 1500	1- 820	1- 510			
D-19	CM01(S-DD)	CM06	100-12.3K	100-6800	100-5100	5-3300	5-1000	
D-20			100-18K	100-12.3K	100-10k	5-5600	5-3000	5-1600
D-30	CM01(EE-LL)	CM07	470-51K	470-30K	470-22K	120-10K	120-6800	120-4K
D-42	CM01(MM-UU)	CM08	5K-100K	5K-68K	5K-51K	470-22K	470-13.2K	470-8.2K
<b>MOULDED AXIALS</b>								
CM-15	CM02-A	CM15	1-1000	1-820	1-680			
CM-20	CM02-B	CM20	100-6800	100-5100	100-3500	51-1500		
CM-30	CM02-C	CM30	470-14K	470-10.2K	470-8000	120-4700		
CM-35	CM02-D	CM35	470-20K	470-16.2K	470-13K	120-6800		
CM-47				2700-62K	2700-50K	1500-27K		
CM-52					1200-220K	820-130K	560-62K	330-22K

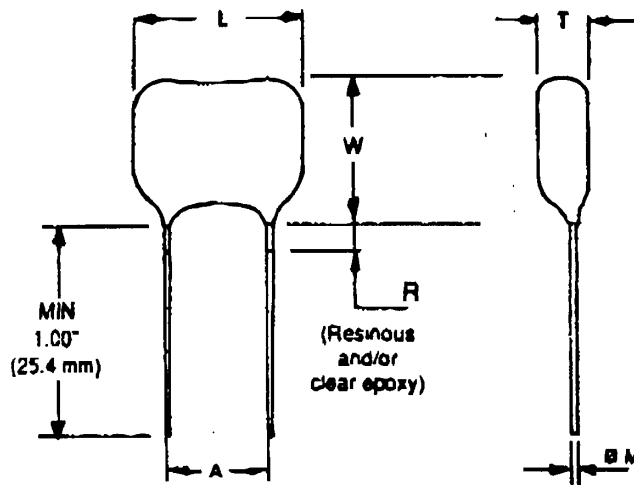
AC	CAPACITANCE RANGE pF	
	125 WVDC	250 WVDC
<b>MOULDED RADIALS</b>		
RM-05		5-270
RM-06		5-820
RM-08		10-1800
RM-10		100-2000
RM-20		2001-10K
RM-30	10100-22K	
RM-40	22100-33K	
RM-50		4700-51K

AC	CAPACITANCE RANGE IN pF		
	50 WVDC	100 WVDC	200 WVDC
<b>MINIATURE DIPPED</b>			
DS-05			5-1000
DS-08		10-3300	10-1800
DS-12		100-10000	100-6800
DS-20	100-22000	100-10000	100-6800

**NOTES:**

1. Capacitance Ranges listed are for AC styles which equal or exceed MIL/JSS Specifications.
2. Radial Dipped Mica Capacitors with suffix 'E' are available in mm lead spacings as follows: \*DE10 : 5mm  
\*DE15 : 5mm \*DE19 : 7.5mm  
\*DE30 : 10mm \*DE42 : 25mm.
3. Radial Dipped Mica Capacitors on special request are available upto 500WVDC voltage for capacitance ranges listed below:  
\*D10 : 1-680pF \*D15 : 1-1200pF  
\*D19 : 430-10KpF \*D30 : 470-30KpF.
4. Burnt in/Life Tested or Established Reliability capacitors to MIL-C-39001, MIL-C-87164 (USAF) or equivalent specifications for Defence and Space Applications are available.
5. Specials to meet individual customer specifications can be developed.
6. CM-52 available upto 6200pF in 3000 WVDC.
7. D-05 available upto 400pF in 50WVDC.

# A.C.L. MICA CAPACITORS



## DIPPED RADIALS

STYLE	A +-0.031 (0.79)	M +-0.002 (0.05)	R MAX
D-05	0.120 ( 3.05)	0.016 (0.41)	0.078 (1.98)
D-07/D-10	0.150 ( 3.81)	0.016 (0.41)	0.125 (3.18)
D-15	0.225 ( 5.72)	0.025 (0.64)	0.125 (3.18)
D-19	0.350 ( 8.89)	0.032 (0.81)	0.141 (3.58)
D-20	0.425 (10.80)	0.032 (0.81)	0.141 (3.58)
D-30	0.425 (10.80)	0.040 (1.02)	0.141 (3.58)
D-42	1.050 (26.67)	0.040 (1.02)	0.141 (3.58)

DIMENSIONS ARE IN INCHES WITH MILLIMETERS IN BRACKETS.

CAPACITANCE (pF)	WV (dc)	DIMENSIONS (INCHES)			DIMENSIONS (MM)		
		L MAX	W MAX	T MAX	L MAX	W MAX	T MAX
<b>STYLE : D-05</b>							
1 - 12	300	0.27	0.19	0.11	6.86	4.83	2.79
13 - 15	300	0.27	0.19	0.12	6.86	4.83	3.05
16 - 24	300	0.27	0.20	0.12	6.86	5.08	3.05
25 - 33	300	0.27	0.20	0.13	6.86	5.08	3.30
34 - 39	300	0.27	0.21	0.13	6.86	5.33	3.30
40 - 51	300	0.27	0.21	0.14	6.86	5.33	3.56
52 - 68	300	0.27	0.22	0.15	6.86	5.59	3.81
69 - 82	300	0.27	0.23	0.16	6.86	5.84	4.06
83 - 91	300	0.27	0.23	0.17	6.86	5.84	4.32
92 - 110	300	0.27	0.24	0.18	6.86	6.10	4.57
111 - 120	300	0.27	0.25	0.19	6.86	6.35	4.83
121 - 130	100	0.27	0.23	0.16	6.86	5.84	4.06
131 - 150	100	0.27	0.23	0.17	6.86	5.84	4.32
151 - 160	100	0.27	0.24	0.17	6.86	6.10	4.32
161 - 180	100	0.27	0.24	0.18	6.86	6.10	4.57
181 - 200	100	0.27	0.25	0.19	6.86	6.35	4.83
201 - 220	50	0.27	0.22	0.15	6.86	5.59	3.81
221 - 240	50	0.27	0.22	0.16	6.86	5.59	4.06
241 - 270	50	0.27	0.23	0.16	6.86	5.84	4.06
271 - 300	50	0.27	0.23	0.17	6.86	5.84	4.32
301 - 360	50	0.27	0.24	0.18	6.86	6.10	4.57
361 - 400	50	0.27	0.25	0.19	6.86	6.35	4.83

## A.C.L. MICA CAPACITORS

CAPACITANCE (pF)	WV (dc)	DIMENSIONS (INCHES)			DIMENSIONS (MM)		
		L MAX	W MAX	T MAX	L MAX	W MAX	T MAX
<b>STYLE : D-07 (SINGLE DIPPED)</b>							
1 - 62	500	0.31	0.25	0.12	7.87	6.35	3.05
63 - 110	500	0.32	0.25	0.13	8.18	6.35	3.30
111 - 180	500	0.32	0.25	0.14	8.18	6.35	3.56
181 - 220	500	0.33	0.25	0.15	8.38	6.35	3.81
221 - 360	500	0.34	0.25	0.16	8.64	6.35	4.06
361 - 510	500	0.34	0.27	0.16	8.64	6.86	4.06
511 - 660	300	0.34	0.27	0.16	8.64	6.86	4.06
661 - 820	300	0.34	0.28	0.16	8.64	7.11	4.06
821 - 940	100	0.34	0.28	0.17	8.64	7.11	4.32
941 - 1500	100	0.34	0.29	0.17	8.64	7.37	4.32
<b>STYLE : D-10</b>							
1 - 24	500	0.36	0.33	0.19	9.14	8.38	4.83
25 - 27	500	0.37	0.33	0.19	9.40	8.38	4.83
28 - 75	500	0.37	0.34	0.19	9.40	8.64	4.83
76 - 100	500	0.37	0.35	0.20	9.40	8.89	5.08
101 - 120	500	0.38	0.35	0.20	9.65	8.89	5.08
121 - 130	500	0.38	0.36	0.20	9.65	9.14	5.08
131 - 160	500	0.38	0.36	0.21	9.65	9.14	5.33
161 - 180	500	0.39	0.37	0.21	9.91	9.40	5.33
181 - 510	500	0.39	0.38	0.22	9.91	9.65	5.59
511 - 820	300	0.39	0.38	0.22	9.91	9.65	5.59
821 - 1500	100	0.39	0.38	0.22	9.91	9.65	5.59
<b>STYLE : D-15</b>							
1 - 62	500	0.45	0.36	0.17	11.43	9.14	4.32
63 - 82	500	0.45	0.36	0.18	11.43	9.14	4.57
83 - 100	500	0.46	0.36	0.18	11.68	9.14	4.57
101 - 130	500	0.46	0.37	0.18	11.68	9.40	4.57
131 - 180	500	0.46	0.37	0.19	11.68	9.40	4.83
181 - 200	500	0.46	0.38	0.19	11.68	9.65	4.83
201 - 240	500	0.46	0.38	0.20	11.68	9.65	5.08
241 - 330	500	0.47	0.39	0.21	11.94	9.91	5.33
331 - 390	500	0.47	0.40	0.22	11.94	10.16	5.59
391 - 430	500	0.48	0.40	0.23	12.19	10.16	5.84
431 - 470	500	0.48	0.41	0.23	12.19	10.41	5.84
471 - 510	500	0.49	0.42	0.24	12.45	10.67	6.10
511 - 680	300	0.47	0.39	0.21	11.94	9.91	5.33
681 - 750	300	0.47	0.40	0.22	11.94	10.16	5.59
751 - 820	300	0.47	0.40	0.23	11.94	10.16	5.84
821 - 910	100	0.48	0.41	0.23	12.19	10.41	5.84
911 - 1000	100	0.49	0.42	0.24	12.45	10.67	6.10
1001 - 1200	100	0.49	0.43	0.26	12.45	10.92	6.60
1201 - 1500	100	0.49	0.44	0.27	12.45	11.18	6.86